

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB 03/05586A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G11B7/00 G11B27/30

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/048225 A1 (SHINODA MASATAKA) 25 April 2002 (2002-04-25) paragraphs '0169!-'0215!; figures 14,15,17B,17D ---	1-11
X	US 6 147 945 A (TAKEDA TORU ET AL) 14 November 2000 (2000-11-14) column 5, line 37 -column 8, line 7; figure 8 column 11, line 47 -column 12, line 46; figure 19 ---	1,7,9,11
A	US 2002/186648 A1 (HORIE MICHIAKU ET AL) 12 December 2002 (2002-12-12) paragraphs '0102!-'0011!; figures 1,2 ---	1-11 -/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## \* Special categories of cited documents :

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Date of the actual completion of the International search  26 March 2004	Date of mailing of the International search report  06/04/2004
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel: (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Stemmer, M

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<b>C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
<b>Category *</b>	<b>Citation of document, with indication, where appropriate, of the relevant passages</b>	<b>Relevant to claim No.</b>
A	US 4 347 619 A (DAKIN WAYNE R ET AL) 31 August 1982 (1982-08-31) column 1, line 55 -column 2, line 35 ---	1-11
A	US 6 275 458 B1 (LEE DAVID C ET AL) 14 August 2001 (2001-08-14) column 6, line 7-18; figure 4 ---	1-11

**INTERNATIONAL SEARCH REPORT**

 International Application No  
 PCT/IB 03/05586

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 2002048225	A1	25-04-2002	JP CN	2002015468 A 1342973 A		18-01-2002 03-04-2002
US 6147945	A	14-11-2000	JP DE DE EP US	9237421 A 69706341 D1 69706341 T2 0793234 A2 5978333 A		09-09-1997 04-10-2001 02-05-2002 03-09-1997 02-11-1999
US 2002186648	A1	12-12-2002	EP WO JP US	1128365 A1 0025308 A1 2001084591 A 2001036143 A1		29-08-2001 04-05-2000 30-03-2001 01-11-2001
US 4347619	A	31-08-1982	AT AU AU BR CA CA DE EP ES JP JP JP JP JP KR	15416 T 541340 B2 7849781 A 8108230 A 1172749 A1 1179052 A2 3172162 D1 0054771 A1 8306942 A1 1487824 C 63040078 B 63092195 A 1448953 C 57124988 A 62059519 B 8801535 B1		15-09-1985 03-01-1985 24-06-1982 05-10-1982 14-08-1984 04-12-1984 10-10-1985 30-06-1982 16-09-1983 23-03-1989 09-08-1988 22-04-1988 11-07-1988 04-08-1982 11-12-1987 19-08-1988
US 6275458	B1	14-08-2001	AU AU CA EP JP WO US	763320 B2 3358400 A 2356858 A1 1179210 A1 2002537622 A 0049603 A1 2002034138 A1		17-07-2003 04-09-2000 24-08-2000 13-02-2002 05-11-2002 24-08-2000 21-03-2002